

CLAIMS

What is claimed is:

1. An access control system comprising:  
an accessed terminal;  
a plurality of access terminals connected to the accessed terminal so  
that communications can be carried out, and access by said access terminals  
is controlled;

wherein said accessed terminal comprises:

an access timing table defining access timing for each of said  
access terminals so that access by said access terminals is dispersed; and  
a timing information notifying section notifying the access  
terminals of timing information indicating access timing corresponding to said  
access terminals with reference to said access timing table, and

wherein said access terminals comprise:

a timing information receiving section receiving said timing  
information; and

an access section for making access to said accessed terminal  
based on the timing information received by said timing information receiving  
section.

2. An access control system comprising:

a first network device group including a first representative network  
device and one or more dependent network devices;

a second network device group including a second representative  
network device and one or more of said dependent network devices; and

a device management terminal managing said network devices;

said first network device group, said second network device group and said device management terminal being connected so that communications can be carried out, said first and second representative network devices collect management information of a plurality of network devices including themselves in network device groups to which the representative network devices belong, and the management information collected by said first and second representative network devices is collected by said device management terminal;

wherein said device management terminal comprises:

an access timing table defining access timing for each of said representative network devices so that access from said first and second representative network devices to the device management terminal is dispersed; and

a timing information notifying section notifying the representative network device of timing information indicating access timing corresponding to said representative network device with reference to said access timing table;

wherein said dependent network devices comprise:

a first management information storing section storing management information of the network device itself; and

a first management information sending section sending management information of said first management information storing section to the representative network device of the network device group to which the network device itself belongs; and

wherein said representative network devices comprise:

a second management information storing section storing management information of said representative network devices and said dependent network devices;

a management information receiving section receiving said management information;

a management information registering section registering in said second management information storing section the management information received by said management information receiving section;

a timing information receiving section receiving said timing information; and

a second management information sending section sending management information of said second management information storing section to said device management terminal based on the timing information received by said timing information receiving section.

3. The access control system according to claim 2, wherein:

said first and second representative network devices each comprise:

a second access timing table defining access timing for each dependent network device so that access by said dependent network devices of the network device group to which the network device itself belongs is dispersed; and

a second timing information notifying section notifying the dependent network device of timing information indicating access timing corresponding to said dependent network device with reference to said second access timing table;

said dependent network device further comprises a second timing information receiving section receiving said timing information; and

said first management information sending section sending management information of said first management information storing section to the representative network device of the network device group to which the network device itself belongs based on the timing information received by said second timing information receiving section.

4. An access control system comprising:

a first network device group consisting of a plurality of network devices;

a second network device group consisting said plurality of network devices; and

a device management terminal managing said network devices;

said first network device group, said second network device group and said device management terminal being connected so that communications can be carried out, any of the network devices belonging to said network device groups serves as a representative network device to collect management information of a plurality of network devices including itself, which belong to the network device group, and the management information collected by each said representative network device is collected by said device management terminal;

wherein said device management terminal comprises:

an access timing table defining access timing for each said representative network device so that access from said representative network devices to the device management terminal is dispersed; and

a timing information notifying section notifying the representative network devices of timing information indicating access timing

corresponding to said representative network devices with reference to said access timing table;

wherein said network devices comprise:

a mode switching section making a switch between a mode in which the network device is said representative network device and a mode in which the network device is a dependent network device other than said representative network device, of said network device group;

a first management information storing section storing management information of the network device itself;

a second management information storing section storing management information of said representative network device and said dependent network device;

a first management information sending section sending management information of said first management information storing section to the representative network device of the network device group to which the network device itself belongs;

a management information receiving section receiving said management information;

a management information registering section registering in said second management information storing section the management information received by said management information receiving section;

a timing information receiving section receiving said timing information; and

a second management information sending section sending management information of said second management information storing section to said device management terminal based on the timing information received by said timing information receiving section;

wherein operations of said management information receiving section, said management information registering section, said timing information receiving section and said second management information sending section are enabled when the network device itself is said representative network device; and

wherein operation of said first management information sending section is enabled when the network device itself is said dependent network device.

5. The access control system according to claim 4, wherein:  
said network device disables operations of said management information registering section and said second management information sending section when the network device itself is said dependent network device.

6. The access control system according to claim 4, wherein:  
said network device group consists of at least three network devices;  
said network devices further comprise:  
a second access timing table defining access timing for each of dependent network devices so that access by said dependent network devices of the network device group to which the network device itself belongs is dispersed;

a second timing information notifying section notifying the dependent network device of timing information indicating access timing corresponding to said dependent network device with reference to said second access timing table; and

a second timing information receiving section receiving said timing information;

operation of said second timing information notifying section is enabled when the network device itself is said representative network device;

operation of said timing information receiving section is enabled when the network device itself is said dependent network device; and

said first management information sending section sends management information of said first management information storing section to the representative network device of the network device group to which the network device itself belongs, based on the timing information received by said second timing information receiving section.

7. The access control system according to claim 6, wherein:

said network device disables operation of said second timing information notifying section when the network device itself is said dependent network device.

8. The access control system according to claim 3, wherein:

said access timing table defines as said access timing at least one of a date and a time when access is started for said each representative network device so that access periods of said representative network devices do not overlap one another.

9. The access control system according to claim 3, wherein:

said second access timing table defines as said access timing at least one of a date and a time when access is started for said each dependent

network device so that access periods of said dependent network devices do not overlap one another.

10. An accessed terminal connected to a plurality of access terminals so that communications can be carried out, comprising:

an access timing table defining access timing for each of said access terminals so that access by said access terminals is dispersed; and

a timing information notifying section notifying the access terminals of timing information indicating access timing corresponding to said access terminals with reference to said access timing table.

11. An access terminal connected to an accessed terminal so that communications can be carried out, comprising:

a timing information receiving section receiving timing information indicating access timing; and

an access section making access to said accessed terminal based on the timing information received by said timing information receiving section.

12. A computer including a program for a terminal connected to a plurality of access terminals so that communications can be carried out, wherein:

said computer carries out processing that is realized as a timing information notifying section notifying the access terminal of timing information indicating access timing corresponding to said access terminal, with reference to an access timing table defining access timing for said each access terminal so that access by said access terminals is dispersed.

13. A computer including a program for a terminal connected to an accessed terminal so that communications can be carried out, wherein

the computer carries out processing that is realized as:

a timing information receiving section receiving timing information indicating access timing; and

an access section making access to said accessed terminal based on the timing information received by said timing information receiving section.

14. An access control method in which a plurality of access terminals and an accessed terminal accessed by said access terminals are connected so that communications can be carried out, and access by said access terminals is controlled, the method comprising:

a timing information notifying step of notifying the access terminals of timing information indicating access timing corresponding to said access terminals with reference to an access timing table defining access timing for each of said access terminals so that access by said access terminals is dispersed, for said accessed terminal;

a timing information receiving step of receiving said timing information; and

an access step of making access to said accessed terminal based on the timing information received in said timing information receiving step.

15. The access control system according to claim 6, wherein:

said access timing table defines as said access timing at least one of a date and a time when access is started for said each representative

network device so that access periods of said representative network devices do not overlap one another.

16. The access control system according to claim 6, wherein:  
said second access timing table defines as said access timing at least one of a date and a time when access is started for said each dependent network device so that access periods of said dependent network devices do not overlap one another.